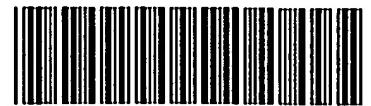# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _09/820,339B_

Source: _1FW/6_

Date Processed by STIC: _12/13/05_

ENTERED

RAW SEQUENCE LISTING   DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B   TIME: 14:01:37

Input Set : **A:\sequence listing.txt**
Output Set: **N:\CRF4\12132005\I820339B.raw**

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       3 <110> APPLICANT: FUCHS, Sara
       4        BARCHAN, Dora
       5        SOUROUJON, Miriam C.
       7 <120> TITLE OF INVENTION: RECOMBINANT FRAGMENTS OF THE HUMAN ACETYLCHOLINE RECEPTOR
AND
       8        THEIR USE FOR TREATMENT OF MYASTHENIA GRAVIS
      10 <130> FILE REFERENCE: FUCHS=2A
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/820,339B
C--> 12 <141> CURRENT FILING DATE: 2001-03-29
      12 <150> PRIOR APPLICATION NUMBER: 09/423,398
      13 <151> PRIOR FILING DATE: 1999-11-08
      15 <150> PRIOR APPLICATION NUMBER: PCT/IL98/00211
      16 <151> PRIOR FILING DATE: 1998-05-06
      18 <160> NUMBER OF SEQ ID NOS: 32
      20 <170> SOFTWARE: PatentIn version 3.3
      22 <210> SEQ ID NO: 1
      23 <211> LENGTH: 630
      24 <212> TYPE: DNA
      25 <213> ORGANISM: Homo sapiens
      27 <400> SEQUENCE: 1
      28 tccgaacatg agacccgtct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg       60
      30 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc      120
      32 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagcaatgg      180
      34 gtggattaca acctaaaatg gaatccagat gactatggcg gtgtgaaaaa aattcacatt      240
      36 ccttcagaaa agatctggcg cccagacctt gttctctata cgatgcaga tggtgacttt      300
      38 gctattgtca agttcaccaa agtgctcctg cagtacactg ccacatcac gtggacacct      360
      40 ccagccatct ttaaaagcta ctgtgagatc atcgtcaccc actttccctt tgatgaacag      420
      42 aactgcagca tgaagctggg cacctggacc tacgacggct ctgtcgtggc catcaacccg      480
      44 gaaagcgacc agccagacct gagcaacttc atggagagcg gggagtgggt gatcaaggag      540
      46 tcccgggggct ggaagcactc cgtgacctat tcctgctgcc ccgacacccc ctacctggac      600
      48 atcacctacc acttcgtcat gcagcgcctg                                       630
      51 <210> SEQ ID NO: 2
      52 <211> LENGTH: 210
      53 <212> TYPE: PRT
      54 <213> ORGANISM: Homo sapiens
      56 <400> SEQUENCE: 2
      58 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
      59 1               5                  10                  15
      62 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
      63            20                  25                  30
      66 Val Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
      67         35                  40                  45
      70 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gln Trp Val Asp Tyr Asn
      71      50                  55                  60
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RAW SEQUENCE LISTING   DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B   TIME: 14:01:37

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\12132005\I820339B.raw

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74  Leu Lys Trp Asn Pro Asp Asp Tyr Gly Gly Val Lys Lys Ile His Ile
75  65                  70                  75                  80
78  Pro Ser Glu Lys Ile Trp Arg Pro Asp Leu Val Leu Tyr Asn Asn Ala
79                      85                  90                  95
82  Asp Gly Asp Phe Ala Ile Val Lys Phe Thr Lys Val Leu Leu Gln Tyr
83                  100                 105                 110
86  Thr Gly His Ile Thr Trp Thr Pro Pro Ala Ile Phe Lys Ser Tyr Cys
87              115                 120                 125
90  Glu Ile Ile Val Thr His Phe Pro Phe Asp Glu Gln Asn Cys Ser Met
91          130                 135                 140
94  Lys Leu Gly Thr Trp Thr Tyr Asp Gly Ser Val Val Ala Ile Asn Pro
95  145              ·      150                 155                 160
98  Glu Ser Asp Gln Pro Asp Leu Ser Asn Phe Met Glu Ser Gly Glu Trp
99                  165                 170                 175
102 Val Ile Lys Glu Ser Arg Gly Trp Lys His Ser Val Thr Tyr Ser Cys
103             180                 185                 190
106 Cys Pro Asp Thr Pro Tyr Leu Asp Ile Thr Tyr His Phe Val Met Gln
107         195                 200                 205
110 Arg Leu
111     210
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114 <210> SEQ ID NO: 3
115 <211> LENGTH: 75
116 <212> TYPE: DNA
117 <213> ORGANISM: Homo sapiens
119 <400> SEQUENCE: 3
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122 catctgcagg atgag   75
125 <210> SEQ ID NO: 4
126 <211> LENGTH: 25
127 <212> TYPE: PRT
128 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 4
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132 Gly Asp Met Val Asp Leu Pro Arg Pro Ser Cys Val Thr Leu Gly Val
133 1               5                   10                  15
136 Pro Leu Phe Ser His Leu Gln Asp Glu
137             20                  25
```
140 <210> SEQ ID NO: 5
141 <211> LENGTH: 705
142 <212> TYPE: DNA
143 <213> ORGANISM: Homo sapiens
145 <400> SEQUENCE: 5
146 tccgaacatg agacccgtct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg   60
148 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc   120
150 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagggtgac   180
152 atggtagatc tgccacgccc cagctgcgtg actttgggag ttcctttgtt ttctcatctg   240
154 caggatgagc aatgggtgga ttacaaccta aaatggaatc cagatgacta tggcggtgtg   300
156 aaaaaaattc acattccttc agaaaagatc tggcgcccag accttgttct ctataacgat   360
158 gcagatggtg actttgctat tgtcaagttc accaaagtgc tcctgcagta cactggccac   420
160 atcacgtgga cacctccagc catctttaaa agctactgtg agatcatcgt cacccacttt   480

```
162 ccctttgatg aacagaactg cagcatgaag ctgggcacct ggacctacga cggctctgtc    540
164 gtggccatca acccggaaag cgaccagcca gacctgagca acttcatgga gagcggggag    600
166 tgggtgatca aggagtcccg gggctggaag cactccgtga cctattcctg ctgccccgac    660
168 accccctacc tggacatcac ctaccacttc gtcatgcagc gcctg                    705
171 <210> SEQ ID NO: 6
172 <211> LENGTH: 235
173 <212> TYPE: PRT
174 <213> ORGANISM: Homo sapiens
176 <400> SEQUENCE: 6
178 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
179 1               5                  10                  15
182 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
183             20                  25                  30
186 Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
187         35                  40                  45
190 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gly Asp Met Val Asp Leu
191     50                  55                  60
194 Pro Arg Pro Ser Cys Val Thr Leu Gly Val Pro Leu Phe Ser His Leu
195 65                  70                  75                  80
198 Gln Asp Glu Gln Trp Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp
199             85                  90                  95
202 Tyr Gly Gly Val Lys Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg
203             100                 105                 110
206 Pro Asp Leu Val Leu Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val
207     115                 120                 125
210 Lys Phe Thr Lys Val Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr
211     130                 135                 140
214 Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile Ile Val Thr His Phe
215 145                 150                 155                 160
218 Pro Phe Asp Glu Gln Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr
219             165                 170                 175
222 Asp Gly Ser Val Val Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu
223             180                 185                 190
226 Ser Asn Phe Met Glu Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly
227         195                 200                 205
230 Trp Lys His Ser Val Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu
231     210                 215                 220
234 Asp Ile Thr Tyr His Phe Val Met Gln Arg Leu
235 225                 230                 235
238 <210> SEQ ID NO: 7
239 <211> LENGTH: 690
240 <212> TYPE: DNA
241 <213> ORGANISM: Homo sapiens
243 <400> SEQUENCE: 7
244 tccgaacatg agacccgtct ggtggcaaag ctatttaaag actacagcag cgtggtgcgg     60
246 ccagtggaag accaccgcca ggtcgtggag gtcaccgtgg gcctgcagct gatacagctc    120
248 atcaatgtgg atgaagtaaa tcagatcgtg acaaccaatg tgcgtctgaa acagggtgac    180
250 atggtagatc tgccacgccc cagctgcgtg actttgggag ttcctttgtt ttctcatctg    240
252 caggatgagc aatgggtgga ttacaaccta aaatggaatc cagatgacta tggcggtgtg    300
```

RAW SEQUENCE LISTING   DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B   TIME: 14:01:37

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\12132005\I820339B.raw

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254 aaaaaaattc acattccttc agaaaagatc tggcgcccag accttgttct ctataacgat  360
256 gcagatggtg actttgctat tgtcaagttc accaaagtgc tcctgcagta cactggccac  420
258 atcacgtgga cacctccagc catctttaaa agctactgtg agatcatcgt cacccacttt  480
260 cccttttgatg aacagaactg cagcatgaag ctgggcacct ggacctacga cggctctgtc  540
262 gtggccatca acccggaaag cgaccagcca gacctgagca acttcatgga gagcggggag  600
264 tgggtgatca aggagtcccg gggctggaag cactccgtga cctattcctg ctgccccgac  660
266 accccctacc tggacatcac ctaccacttc                                      690
269 <210> SEQ ID NO: 8
270 <211> LENGTH: 230
271 <212> TYPE: PRT
272 <213> ORGANISM: Homo sapiens
274 <400> SEQUENCE: 8
276 Ser Glu His Glu Thr Arg Leu Val Ala Lys Leu Phe Lys Asp Tyr Ser
277 1               5                   10                  15
280 Ser Val Val Arg Pro Val Glu Asp His Arg Gln Val Val Glu Val Thr
281             20                  25                  30
284 Ala Gly Leu Gln Leu Ile Gln Leu Ile Asn Val Asp Glu Val Asn Gln
285         35                  40                  45
288 Ile Val Thr Thr Asn Val Arg Leu Lys Gln Gly Asp Met Val Asp Leu
289     50                  55                  60
292 Pro Arg Pro Ser Cys Val Thr Leu Gly Val Pro Leu Phe Ser His Leu
293 65              70                  75                  80
296 Gln Asp Glu Gln Trp Val Asp Tyr Asn Leu Lys Trp Asn Pro Asp Asp
297             85                  90                  95
300 Tyr Gly Gly Val Lys Lys Ile His Ile Pro Ser Glu Lys Ile Trp Arg
301         100                 105                 110
304 Pro Asp Leu Val Leu Tyr Asn Asn Ala Asp Gly Asp Phe Ala Ile Val
305         115                 120                 125
308 Lys Phe Thr Lys Val Leu Leu Gln Tyr Thr Gly His Ile Thr Trp Thr
309     130                 135                 140
312 Pro Pro Ala Ile Phe Lys Ser Tyr Cys Glu Ile Ile Val Thr His Phe
313 145                 150                 155                 160
316 Pro Phe Asp Glu Gln Asn Cys Ser Met Lys Leu Gly Thr Trp Thr Tyr
317             165                 170                 175
320 Asp Gly Ser Val Val Ala Ile Asn Pro Glu Ser Asp Gln Pro Asp Leu
321             180                 185                 190
324 Ser Asn Phe Met Glu Ser Gly Glu Trp Val Ile Lys Glu Ser Arg Gly
325         195                 200                 205
328 Trp Lys His Ser Val Thr Tyr Ser Cys Cys Pro Asp Thr Pro Tyr Leu
329     210                 215                 220
332 Asp Ile Thr Tyr His Phe
333 225                 230
336 <210> SEQ ID NO: 9
337 <211> LENGTH: 20
338 <212> TYPE: DNA
339 <213> ORGANISM: Artificial
341 <220> FEATURE:
342 <223> OTHER INFORMATION: synthetic
344 <400> SEQUENCE: 9
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RAW SEQUENCE LISTING   DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B   TIME: 14:01:37

Input Set : **A:\sequence listing.txt**
Output Set: **N:\CRF4\12132005\I820339B.raw**

```
345 ccggatccga acatgagacc                                    20
348 <210> SEQ ID NO: 10
349 <211> LENGTH: 23
350 <212> TYPE: DNA
351 <213> ORGANISM: Artificial
353 <220> FEATURE:
354 <223> OTHER INFORMATION: synthetic
356 <400> SEQUENCE: 10
357 cggaattcca ggcgctgcat gac                                23
360 <210> SEQ ID NO: 11
361 <211> LENGTH: 26
362 <212> TYPE: DNA
363 <213> ORGANISM: Artificial
365 <220> FEATURE:
366 <223> OTHER INFORMATION: synthetic
368 <400> SEQUENCE: 11
369 cggaattctg gaggtgtcca cgtgat                             26
372 <210> SEQ ID NO: 12
373 <211> LENGTH: 23
374 <212> TYPE: DNA
375 <213> ORGANISM: Artificial
377 <220> FEATURE:
378 <223> OTHER INFORMATION: synthetic
380 <400> SEQUENCE: 12
381 ccggatccgc catctttaaa agc                                23
384 <210> SEQ ID NO: 13
385 <211> LENGTH: 25
386 <212> TYPE: DNA
387 <213> ORGANISM: Artificial
389 <220> FEATURE:
390 <223> OTHER INFORMATION: synthetic
392 <400> SEQUENCE: 13
393 ggccatgggc tccgaacatg agacc                              25
396 <210> SEQ ID NO: 14
397 <211> LENGTH: 29
398 <212> TYPE: DNA
399 <213> ORGANISM: Artificial
401 <220> FEATURE:
402 <223> OTHER INFORMATION: synthetic
404 <400> SEQUENCE: 14
405 ccggatcctc aaaagtgrta ggtgatrtc                          29
408 <210> SEQ ID NO: 15
409 <211> LENGTH: 24
410 <212> TYPE: DNA
411 <213> ORGANISM: Artificial
413 <220> FEATURE:
414 <223> OTHER INFORMATION: synthetic
416 <400> SEQUENCE: 15
417 cgctatgggg ctgcttgttg acag                               24
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 12/13/2005
PATENT APPLICATION: US/09/820,339B   TIME: 14:01:38

Input Set : **A:\sequence listing.txt**
Output Set: **N:\CRF4\12132005\I820339B.raw**

<u>Invalid <213> Response:</u>
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32

VERIFICATION SUMMARY   DATE: 12/13/2005
PATENT APPLICATION: **US/09/820,339B**   TIME: 14:01:38

Input Set : **A:\sequence listing.txt**
Output Set: **N:\CRF4\12132005\I820339B.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date